



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-0069; Directorate Identifier 2016-NE-01-AD; Amendment 39-18685; AD 2016-21-04]

RIN 2120-AA64

Airworthiness Directives; Continental Motors, Inc. Reciprocating Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Continental Motors, Inc. (CMI) TSIO-550-K, TSIOF-550-K, TSIO-550-C, TSIOF-550-D, and TSIO-550-N reciprocating engines. This AD was prompted by a report of an uncommanded in-flight shutdown (IFSD) resulting in injuries and significant airplane damage. This AD requires replacing the oil cooler cross fitting assembly. We are issuing this AD to prevent failure of the oil cooler cross fitting and engine, IFSD, and loss of the airplane.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Continental Motors, Inc., 2039 Broad Street, Mobile, Alabama 36615; phone: 800-326-0089; Internet: <http://www.continentalmotors.aero>. You may view this service information at

the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-0069; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Scott Hopper, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, Small Airplane Directorate, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5535; fax: 404-474-5606; email: scott.hopper@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain CMI TSIO-550-K, TSIOF-550-K, TSIO-550-C, TSIOF-550-D, and TSIO-550-N reciprocating engines. The NPRM published in the Federal Register on March 11, 2016 (81 FR 12833). The NPRM was prompted by a report of an uncommanded IFSD resulting in injuries and significant airplane damage. The NPRM proposed to require replacing the oil cooler cross fitting assembly. We are issuing this AD to correct the unsafe condition on these products.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

Change to Cost of Compliance

We increased our estimate of the cost of the affected parts in this AD from \$0 to \$261 per engine and increased the number of labor hours to perform the replacement from 1 to 2 hours. This increased the overall estimated cost of compliance from \$111,095 to \$563,317.

Update to Service Information

We revised our reference in this AD from CMI Critical Service Bulletin (CSB) CSB15-7, Revision A, dated November 10, 2015 (also referred to as CMI CSB CSB15-7A, dated November 10, 2015) to CMI CSB CSB15-7, Revision B, dated April 26, 2016 (also referred to as CMI CSB CSB15-7B) to reflect the latest service information published by CMI.

Clarification of Part Number

We clarified in this AD that the affected oil cooler cross fitting has a part number AN918-1J or AN918-2J.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for the changes noted above. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Relevant Service Information under 1 CFR Part 51

We reviewed CMI CSB CSB15-2, Revision C, dated November 9, 2015 (also referred to as CMI CSB CSB15-2C, dated November 9, 2015), and CMI CSB CSB15-7, Revision B, dated April 26, 2016 (also referred to as CMI CSB CSB15-7B, dated April 26, 2016). The CSBs describe detailed procedures for replacing oil cooler cross fittings, nipples, and bushings with a redesigned oil cooler cross fitting. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 1,307 engines installed on airplanes of U.S. registry. We also estimate that it will take about 2 hours per engine to comply with this AD. The average labor rate is \$85 per hour. Parts cost about \$261 per engine. Based on these figures, we estimate the total cost of this AD to U.S. operators to be \$563,317. Our cost estimate is exclusive of possible warranty coverage.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2016-21-04 **Continental Motors, Inc. (Type Certificate previously held by Teledyne Continental Motors) Reciprocating Engines:** Amendment 39-18685; Docket No. FAA-2016-0069; Directorate Identifier 2016-NE-01-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Continental Motors, Inc. (CMI) TSIO-550-K, TSIOF-550-K, TSIO-550-C, TSIOF-550-D, and TSIO-550-N reciprocating engines with an engine serial number below 1012296 and an oil cooler cross fitting, part number AN918-1J or AN918-2J, installed.

(d) Unsafe Condition

This AD was prompted by a report of an uncommanded in-flight shutdown (IFSD) resulting in injuries and significant airplane damage. We are issuing this AD to prevent failure of the oil cooler cross fitting and engine, IFSD, and loss of the airplane.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) Within 12 months or 100 flight hours after the effective date of the AD, whichever occurs first, replace the oil cooler cross fitting, nipple, and bushing. Use the Action Required paragraphs III.1 through III.8 of CMI Critical Service Bulletin (CSB) CSB15-2, Revision C, dated November 9, 2015 (also referred to as CMI CSB CSB15-2C, dated November 9, 2015), or the Action Required paragraphs III.1 through III.8 of CMI CSB CSB15-7, Revision B, dated April 26, 2016 (also referred to as CMI CSB15-7B, dated April 26, 2016), to perform the replacement.

(2) Reserved.

(f) Credit for Previous Actions

You may take credit for the replacement that is required by paragraph (e) of this AD, if the replacement was performed before the effective date of this AD using CMI CSB CSB15-2B, dated November 6, 2015 or earlier versions; or CSB CSB15-7A, dated November 10, 2015 or earlier version.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Atlanta Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(h) Related Information

For more information about this AD, contact Scott Hopper, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, Small Airplane Directorate, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5535; fax: 404-474-5606; email: scott.hopper@faa.gov.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Continental Motors, Inc. (CMI) Critical Service Bulletin (CSB) CSB15-2, Revision C, dated November 9, 2015 (also referred to as CMI CSB CSB15-2C, dated November 9, 2015).

(ii) CMI CSB CSB15-7, Revision B, dated April 26, 2016 (also referred to as CMI CSB CSB15-7B, dated April 26, 2016).

(3) For CMI service information identified in this AD, contact Continental Motors, Inc., 2039 Broad Street, Mobile, Alabama 36615; phone: 800-326-0089; Internet: <http://www.continentalmotors.aero>.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on October 7, 2016.

Colleen M. D'Alessandro,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2016-24794 Filed: 10/13/2016 8:45 am; Publication Date: 10/14/2016]